Response to Commissioner Barker's Questions from the Environmental Forum at Copperhill June 2, 2005

Calcine Removal & Safety of Transport

The understanding is that the cars hauling the calcine will be loaded and sit in the rail yard for a number of days until they can be transported.

What precaution has been taken to prevent cars from leaking calcine as they sit in the rail yard waiting for transport?

RESPONSE: Iron calcine is basically "rust" with some contaminants. It is not anticipated that minor leakage onto the railyard would cause a problem. Spillage of materials into the railyard will be addressed in the future by EPA.

How will you prevent the dried calcine from being blown out of the cars by the wind as they sit waiting for transport?

RESPONSE: Fugitive emissions would be regulated as per Division Rule 1200-3-8-.01 (2) which states that no person shall cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Chapter 1200-3-20. Once the rail cars left the company property this rule would no longer be applicable.

Emissions from the calcine removal should be minimal. The digging of the calcine and the loading of it into rail cars will occur well within the Intertrade property lines. The density (weight per volume) of the calcine is such that it has been reported to the Division that the rail cars are not loaded to the top, which will serve to minimize any fugitive losses while the rail cars are in motion.

What tests have been conducted to determine the toxins/pollutants in the calcine? What toxins/pollutants were being sought out during testing? Who conducted these tests?

RESPONSE: Please see Attachments 1, 2, and 3. The analysis conducted by Analytical Industrial Research Laboratories of Cleveland, TN was performed for Tennessee Minerals and the analyses specified in the June 9, 2005 memorandum from Tom Moyer of Black and Veatch were performed for the United States Environmental Protection Agency.

As Tennessee Minerals removes the calcine, are there plans for ongoing testing? If yes, who will do the testing, how often and by whom? If there are no plans for ongoing testing of the calcine, please explain why not.

RESPONSE: The Division of Air Pollution Control does not plan to conduct any ongoing testing. It is not anticipated that there will be any significant change in the composition of the calcine material. The analysis of calcine initially presented to the Division did not indicate that there would be any problem with the issuance of an air pollution permit.

What will the length of the trains be?

RESPONSE: This question does not fall under the authority of the Tennessee Department of Environment and Conservation.

What times of day will they run the train?

RESPONSE: This question does not fall under the authority of the Tennessee Department of Environment and Conservation.

If there is a derailment, what is the disaster plan for the railroad? Are authorities aware of the disaster plan?

RESPONSE: Please see Attachment 4, letter dated June 9, 2005 from Rick Beals of the Tennessee Department of Transportation.

During transportation, what government authority should be called if there is a spillage of calcine? Should the area be quarantined?

RESPONSE: If transport is by railroad, please see Attachment 4, letter dated June 9, 2005 from Rick Beals of the Tennessee Department of Transportation.

If transport is by truck, please see Attachment 5, e-mail transmittal dated June 7, 2005 from James Vandyke of the Tennessee Department of Safety.

Also, to report oil or chemical spills, you may call the National Response Center at 1-800-424-8802.

Copperhill Rail Yard

For decades, hazardous and extremely hazardous materials were stored and passed through the rail yard on the banks of the Ocoee River in Copperhill.

Has this area been tested for toxins/pollutants? If yes, what toxins/pollutants were sought out? When were the tests performed and by whom?

If no, why have tests not been conducted to ensure safety of the Ocoee?

[All of the above questions are addressed below]

RESPONSE: The rail yard will be investigated by the United States Environmental Protection Agency as part of the Davis Mill Creek investigation. To date there has not been extensive evaluation of the rail yard. The focus of the Davis Mill Creek investigation is to investigate and address the major causes of pollution to the Ocoee River first and compared to other areas being evaluated and addressed, the rail yard is not a major source of pollution to the Ocoee River.

October 2004 Sulfur Trioxide Release

Officials from TDEC indicated that the sulfur trioxide leak in October was not an emergency based on information given to them by Intertrade Holdings. TDEC did not visit the Copper Basin until two days after the incident. Why does TDEC, allow Intertrade to self-report and determine if an incident is an emergency?

RESPONSE: As to why TDEC allows Intertrade to self report incidents and to determine if an incident is an emergency, such reporting is mandatory under the provisions of Division Rule 1200-3-20-.03 which requires the reporting of emissions in excess of the applicable emission standard or which may potentially cause damage to property or public health. Further the regulation requires

that any situation that creates an imminent hazard to health to be immediately reported to the state emergency management office.

From the October 14, 2004 company report of the situation it is noted that emergency responders from Polk County were called, as was Tennessee Emergency Management. A copy of this report (Attachment 6) is incorporated with this response. The report goes on to state that the visible cloud had largely dissipated by the time local emergency responders came on the scene. From the report it is noted that no actions were necessary by responders to alleviate the situation. With the situation resolved, there was no need for immediate response by TDEC personnel.

What measure has been taken to prevent further toxic air releases?

RESPONSE: Intertrade has changed its operating procedures to prevent a reoccurrence of the situation. Further details of this are provided in the October 14, 2004 company report of the situation. A copy of this report is incorporated with Attachment 6.

TDEC has indicated that monitors in the Copper Basin did not detect the sulfur trioxide release. According to eyewitnesses, the area was filled with a cloud of sulfur trioxide. Why did the monitors not detect this?

RESPONSE: The ambient air monitoring equipment located in the Copper Basin is designed to specifically monitor sulfur dioxide emissions and would not detect sulfur trioxide. Sulfur dioxide is one of the criteria air pollutants established by the USEPA and the pollutant for which the Copper Basin was determined to be exceeding the ambient air quality standards for a number of years. Detailed information concerning this is contained in Attachment 7 'Copper Basin Sulfur Dioxide Ambient Data Summary.'

Sulfur trioxide reacts with the moisture in the ambient air to form a sulfuric acid mist and it is most likely that it was the sulfuric acid mist rather than the sulfur trioxide that formed the visible cloud. According to the company report of the situation, the visible cloud had largely dissipated within thirty minutes of the start of the incident. Also the company report of the situation indicated that the maximum amount of sulfur trioxide released was fifty pounds. Given these facts, the Division has serious doubts as to whether detectable amounts of either sulfur trioxide or sulfuric acid mist would have been measured off company property.

How many and where are air monitors located in the Copper Basin? Who is in charge of these monitors and how often are they tested for accuracy?

RESPONSE: Please see attached a map (Attachment 8) that identifies the locations of the Tennessee operated monitoring sites that are currently operating in the Copperhill area. The two maps display only the currently active monitoring sites in this area. The topo map provided also shows the approximate location of the Intertrade facility boundary.

The monitors are audited by the Tennessee Department of Health Division of Laboratory Services field auditors on a quarterly basis during which time an accuracy determination is performed.

TDEC Air Pollution Control staff operate the two monitoring sites from the Chattanooga Field Office.

What chemicals do the monitors detect and what happens when a chemical is detected?

RESPONSE**:** As stated above the ambient monitors are for the monitoring of sulfur dioxide emissions to determine compliance with the federally promulgated national ambient air quality standards for sulfur dioxide. If an exceedance of any of the ambient air quality standards for sulfur dioxide is measured, the Division would, as it has historically done, investigate to determine the cause of the air quality problem and to require the company to take measures to prevent a reoccurrence of the situation.

Illegal Release of DPO into Water

What system is in place to detect illegal dumping into the streams in and around the Intertrade facility?

RESPONSE: The Intertrade Holding Inc. facility has a Tennessee Multisector Storm Water Permit (TMSP) that requires all storm water falling on the facility to be captured and sent to the Cantrell Flats Waste Water Treatment Plant (CFWWTP). The CFWWTP has a National Pollution Discharge Elimination System (NPDES) Permit that regulates the quantities of materials that can be discharged/released into the Ocoee River.

These two permits are effective in controlling materials that occur within the boundaries of the facility. There is no system that can be put in place that will allow the Tennessee Division of Water Pollution Control (WPC) or the U. S. Environmental Protection Agency to detect illegal dumping if some individual(s) wish to dump materials illegally. The environmental agencies rely upon citizens who live in the area to make us aware of any unusual or suspicious activities that are occurring. When such information is received then the regulatory agencies can investigate and backtrack events to those responsible.

Why did monitors not detect DPO in Davis Mill Creek?

RESPONSE: To the knowledge of WPC DPO never was released into Davis Mill Creek. DPO was detected initially by smell at the CFWWTP outfall in the Ocoee River. The DPO incident illustrates that the TMSP permit for Intertrade Holdings is effective in containing materials within the boundaries of the facility. The presence of DPO was not identified in the routine chemical monitoring required by the NPDES permit for CFWWTP because it had not been identified as a potential waste stream constituent. DPO is used by Intertrade as a basic component of a chemical process to make a marketable product. The chemical process is a closed loop system, consequently, basic constituents would not be expected to be released into the waste water system that goes to CFWWTP.

The concentrations of DPO that were documented in the discharges to the Ocoee River while detectable by odor were not high enough to pose a health concern for people coming into contact with the compound nor were they high enough to be toxic to fish and aquatic life. That said the fact DPO was present in the discharge does not relieve Intertrade Holdings from being in non-compliance with their NPDES Permit.

Who tests the cleanliness of Davis Mill Creek, how often and for what chemicals are the tests being performed?

RESPONSE: With the exception of large storm events the majority of flow in Davis Mill Creek is collected and pumped to the CFWWTP for treatment before being released to the Ocoee River.

The treated water from the CFWWTP is monitored daily for metals and pH to assure that the releases meet the requirement of the NPDES permit.

Who tests the cleanliness of Ocoee River, how often and for what chemicals are the tests being performed?

RESPONSE: Water quality of the Ocoee River is monitored by WPC each quarter for bacteria, metals (including copper), pH, dissolved oxygen, and conductivity. Then once every five years WPC conducts a comprehensive water quality assessment of the Ocoee River and its tributary streams. During this comprehensive assessment in addition to pH, dissolved oxygen, conductivity, metals, chemical oxygen demand, and nutrients the status of the aquatic habitat is determined as well as the condition of the aquatic macroinvertebrate (food chain organisms) community.

The Tennessee Valley Authority (TVA) periodically collects fish population data from the Ocoee Reservoirs. In addition, TVA collects fish flesh to analyze for possible accumulations of pollutants.

According to local papers, TDEC and EPA have admitted that Intertrade dumped DPO knowingly into Davis Mill Creek. The reports further indicated that this was a violation of the law. Why were no fines levied for this ongoing event? Related to this, the City of Copperhill who is making an effort to prevent pollutants from entering the Ocoee River is facing fines for its practices at its wastewater treatment facility. Why does one group face a fine when a good faith effort is being made and another group is not fined when they are knowingly breaking the law as reported?

RESPONSE: As noted in Response No. 2 above, WPC is not aware that DPO was ever released into Davis Mill Creek. There was a release of DPO into the Ocoee River and this release was an unauthorized release of an unpermitted substance. Upon being notified of the existence of DPO in the discharge from CFWWTP Intertrade Holdings was very cooperative in assisting with the investigation to locate the source of the DPO and took immediate actions to clean up the source and to track the material through out their storm water system (the system controlled by the TMSP permit). Intertrade also agreed to immediately to begin monitoring for DPO in several locations within the storm water collection system and at CFWWTP. Because Intertrade acted responsibly no fines were levied.

The City of Copperhill's Waste Water Treatment Plant (WWTP) is not a comparable situation to Intertrade and the release of DPO. The City of Copperhill has an NPDES Permit for their WWTP. The quality of the water being released from the WWTP was not meeting the limits required by the NPDES Permit. One of the basic reasons the requirements were not being achieved is that when the plant was built the contractor did not install the correct type of pumps and other equipment. As a result the plant cannot properly treat sewage. The City of Copperhill has been pursuing legal settlement but the contractor has gone bankrupt leaving the City of Copperhill "holding the bag." The City of Copperhill is seeking a Community Development Block Grant (CDBG) from the Tennessee Department of Economic and Community Development. In order for the City of Copperhill to be able to compete for the CDBG money the WWTP had to be under an Administrative Order. Consequently, it was and is an advantage for the City of Copperhill to be issued a compliance order.

Is Intertrade presently illegally dumping DPO into Davis Mill Creek? What tests are being conducted and by whom to ensure that this practice has been stopped?

RESPONSE: Intertrade is not presently dumping DPO into either Davis Mill Creek or the Ocoee River. Intertrade is monitoring the discharges from the CFWWTP for DPO and reports that data to WPC's Chattanooga Field Office. Since the initial incident and clean up of the storm water collection system DPO levels have been at or below analytical detection limits. There have been a couple of times when after a prolonged number of weeks during which the DPO levels were below detection limits that DPO levels would rise above detection levels. When such events have occurred Intertrade has increased the number and frequency of analyses to try and determine the sources of these infrequent positive results.

Title V Permit for Acid Plant

(note: response provided by Daphne Wilson of US EPA Region 4)
What is the current status of the permit?

RESPONSE: The final permit was issued on May 23, 2005.

TDEC waited 18 months to recommend issuance of the Title V permit. Intertrade now says that the acid plant has been sold. Why would a permit be issued for a facility that will not exist?

RESPONSE: When TDEC submitted the proposed Title V permit for EPA review Intertrade had not notified the permitting authority of its intention of any change in operation of the acid plant or any desire to withdraw that portion of the permit application.

Would it not save time and the taxpayers dollars to wait and see if the acid permit is going to be needed?

RESPONSE: The permitting authority has a regulatory obligation to permit the Title V source. The emission units listed in the permit are based on the permit application and any subsequent revisions to the application that are submitted to the permitting authority by the source.

If the permit is not needed how can it be sold or traded to another company?

RESPONSE: If a source changes its name or is sold to another company, the permit is transferred to the new owner once written notification has been received. The permit is then revised accordingly and compliance with the terms and conditions of the permit is the responsibility of the new owner. If there is a change in operation and an emission unit is permanently discontinued, the source must notify the permitting authority of the change in order to have the permit revised and conditions removed. Otherwise the source is responsible for complying with the applicable requirements for that unit as long as it is in the permit.

Current Issues with Intertrade

When a leak, spill or disaster occurs at Intertrade, who pays for this?

RESPONSE: Typically, under environmental statutes, an owner or operator that causes a spill or leak would be responsible for paying for the necessary response action. However, the Air Pollution Control Regulations do not specifically address the issue of damages. The Air Pollution Control

Division would enforce the applicable regulations for any given situation. The issue of any potential damages would be a civil legal issue in which the Air Pollution Control Division would not be involved.

In the event of a disaster, does Intertrade have liability insurance to cover this?

RESPONSE: We do not know. Whether a company has liability insurance is a business decision that the company makes. Currently, the Tennessee Department of Environment and Conservation has no regulatory requirement for the company to have liability insurance.

Is it legal to operate a business of this nature without insurance to cover a disaster?

RESPONSE: Whether a company has liability insurance is a business decision that the company makes. Currently, the Tennessee Department of Environment and Conservation has no regulatory requirement for the company to have liability insurance.

Other than the calcine, what other dumpsites have been identified at the present Intertrade facility?

RESPONSE: EPA performed an "Inventory of Solid Mine Wastes, By-Product Materials, and Contaminated Areas in the Davis Mill Creek Watershed." This report is available for review at the Copper Basin Project Information Repository at the Ducktown Chamber of Commerce.

Are those dumps presently on schedule for removal?

RESPONSE: No. The remedial investigation is not complete. A purpose of the remedial investigation process is to both identify what is there and to determine what if anything has to be done to protect human health and the environment. In the meantime, interim measures such as refurbishing Cantrell Flats Wastewater Treatment Plant to treat Davis Mill Creek water, fencing safety hazards, and ongoing site security protect human health and the environment during the remedial investigation process.

Have you been informed of any dumpsites at Intertrade that have not been found? If yes, who investigated the sites and what tests were performed?

RESPONSE: To a large extent the investigation to date was limited to material on the surface of the ground. Several areas of subsurface contamination are also known. Several have already been investigated. Additional subsurface investigation may occur in the future.

What chemicals including extremely hazardous and hazardous materials are presently on site at Intertrade? Related to this question, are local emergency and police authorities in Polk County, Tennessee and Fannin County, Georgia aware of what materials are on site at Intertrade?

RESPONSE: A copy of the notification that Intertrade sent to the East Polk Fire Department is included (see Attachment 9). This notification includes the listing of regulated materials which are reportable under the provisions of SARA Title III, Section 312.

This information was also forwarded to the Fannin County Commissioner's Office.

Information on other chemicals used at the facility can be found in the Title V Permit Application which is available at the Copperhill Public Library.

What specific instructions have been given to these authorities on proper procedure if a spill or leak occurs? If none have been given, then why not?

RESPONSE: This is a matter for the local emergency management personnel including but not limited to sheriff, fire department, Tennessee Emergency Management.

If a disaster occurs at the Intertrade facility, what is the evacuation plan for the area and where can one obtain a copy?

RESPONSE: This is a matter for the local emergency management personnel including but not limited to sheriff, fire department, Tennessee Emergency Management.

If there is no evacuation plan, then please make recommendations of what the citizens should do in the event of a toxic release.

RESPONSE: Follow directions given by local emergency management personnel including but not limited to sheriff, fire department, Tennessee Emergency Management.

Attachments (Link to ZIP File Containing All Attachments)

Attachment	1	Calcine Analysis
Attachment	2	Calcine Analysis
Attachment	3	Calcine Analysis
Attachment	4	Rick Beals DOT Letter concerning Railroad Safety
Attachment	5	James Vandyke Letter concerning Trucks Hauling Loose Material
Attachment	6	Letters concerning October 5, 2004 SO3 Release
Attachment	7	Copper Basin Sulfur Dioxide Ambient Data Summary
Attachment	8	Maps of Air Quality Monitoring Stations
Attachment	9	Hazardous Chemical Inventory